

**Aim:** To learn the structure of DNA and how to draw a diagram showing the key parts of the DNA molecule.

## Introduction – Three Shapes to learn

DNA diagrams are often simplified to show the components as simple shapes joined in the right way to each other.

Each shape represents a functional group made of

You have to test the sugars.

### Examiner's note

Biological Diagrams need: strong clear lines, accurate shapes, neat labelling, & no shading.

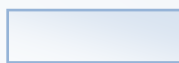
**Note:** The three components of DNA:



Deoxyribose sugar



Phosphate



Nitrogenous base ( T, A, C, G )

Draw your diagram here

## The Structure of DNA

Sugar (deoxyribose)	Together with the phosphate molecules makes the backbone of DNA
Phosphate group	Together with the sugar it makes the backbone of DNA
Base (nitrogen-containing)	One of four different bases. The order of these bases on the DNA makes the genetic code.
A	Adenine - the base that pairs with Thymine
T	Thymine - the base that pairs with Adenine
C	Cytosine - the base that pairs with Guanine
G	Guanine - the base that pairs with Cytosine
Hydrogen Bonds	The weak bonds that hold the two strands of DNA together.
Double Helix	The name of the twisted shape of the DNA molecule, as it contains two strands.
Complementary base pairing	The specific pairing of bases in DNA: A to T and C to G